

**SECTION C****GENERAL BUILDER'S WORKS****1.0 SITE CLEARANCE AND DEMOLITION WORKS**

- 1.1 The Demolition Works shown on the Drawings are for the Contractor's guidance only. The Contractor shall visit the proposed site to establish the extent of such work if necessary. The dimensions and sizes indicated herein and on the Drawings are only approximate, it is the Contractor's responsibilities to verify the actual dimensions and sizes on site with the PM/ Designer
- 1.2 The Contractor shall demolish and remove with the prior permission of the PM all existing obstructions and fixtures made redundant by the Works which are within the contract limit and/ or related to the proposed works.
- 1.3 Demolition is to be carried out in such a manner so as to cause as little inconvenience as possible to adjoining facilities and the public. The contractor will be held responsible for any such claims that may arise from the disregard of this clause.
- 1.4 The Contractor should study all tender Drawings carefully and it is particularly imperative for this section of the work that he intends to include in his tender price. He shall allow in his tender for any other cognate items of work not mentioned specifically herein but shown, implied, intended or can otherwise be ascertained from the Drawings and is required by the PM. The Client shall entertain no claim on account of this clause.
- 1.5 The Contractor shall take all necessary steps to avoid any damage to the remaining parts of the building structure, finishes and fixtures. Not-standing any approval or concurrence given by the PM/ Designer, all demolition works shall be carried out at his own risk and if any damage should occur in carrying out the works, the Contractor shall make good forthwith or reinstate the same at his own expense and to the satisfaction of the PM. All making good is to be executed with materials and workmanship to match in every respect with the surrounding work is to be properly bonded thereto.
- 1.6 The Contractor shall prior to the commencement of and after demolition works, engage qualified personnel approved by the PM to conduct a pre and post condition survey. The pre-condition survey report shall be submitted to the PM prior to commencement of the demolition works, while the post-condition survey report shall be submitted after the demolition works have been completed. The survey reports shall contain labeled photographic records of the structures in proximity to the demolition works. Any cracks appearing on the structures either before or after the demolition works, shall be identified or described in detail in the respective reports.
- 1.7 The Contractor shall provide all necessary shoring, hoarding, temporary supports, screens, etc. to ensure safety of the persons and surrounding properties and to the satisfaction of the PM. He shall ensure sufficiency of temporary works for the new and existing works, protection against inclement weather and make good all defects and work disturbed as the works progress. The construction and efficiency of such supports shall be the entire responsibility of the Contractor. Should any subsidence or any damage result from the inadequacy or inefficiency of the shoring or any other support provided, the damage shall be made good by the Contractor at his own expense.

- 1.8 Before commencing the demolition works in any part of the existing facilities, all electrical, telephone, plumbing, drainage and other services that come within the area of work shall be disconnected, diverted or protected to the approval of the PM.
- 1.9 Removal of M&E equipment and plumbing fittings such as sanitary wares, pipes, etc. shall include disconnection, diversion, sealing or plugging, protection, connecting pipes to new fittings, etc
- 1.10 All surfaces arising from demolition works unless otherwise stated shall be properly prepared to receive new works including making good all works disturbed and surrounding surface to match existing. The Contractor is deemed to have included all such reinstatement works in the tender prices.
- 1.11 The Contractor shall propose the methods of demolition. The Contractor shall submit full proposal, which give details on his method, sequence, tools and equipment before commencement of works on site. These shall include supporting brochures, the level of noise, dust and vibration that would be generated.
- 1.12 During the course of works, the Contractor shall keep the site of his operations in as clean and neat conditions as possible. He shall remove all equipment, tools and dispose all residues after the demolition works. He shall leave the entire site of the work in neat and orderly condition.

## **2.0 BRICK/BLOCK WORKS**

- 2.1 Brick/Block work shall be as specified herein and in relevant clauses with the General specifications of this tender document.
- 2.2 The Contractor shall construct all brick/block work as specified to thickness as shown on drawings. Contractor to highlight any discrepancy of drawings to PM /Designer before ordering of materials.
- 2.3 Where the brickwork abuts against concrete surfaces, provide 6mm/dia. mild steel bonding ties of 450mm long at 600mm center to center.
- 2.4 The Contractor shall provide all necessary vertical and horizontal stiffeners for Brick/Block works.
- 2.5 All fire rated Brick/Block walls shall be certified by PSB to meet local fire safety standards.

## **3.0 PARTITION WORKS**

- 3.1 Partition works shall be as specified herein and in relevant clauses with the General specifications of this tender document.
- 3.2 All partitions are to be fixed firmly to floor slabs, ceiling channels and on any floor with positive non-corrosive screws. All studs are to be 600 center to center vertically and with horizontal bracing when required. 50mm thick rock-wool insulation of 80kg/m<sup>3</sup> shall be properly inserted before closure of partition boards.

- 3.3 As and when specified or shown in drawing, gypsum partitions are to come with treated timber frame reinforcements, particularly partitions with wall hang components or carpentry items. Otherwise, all gypsum partition is to be constructed in non-combustible framing.
- 3.4 All plasterboards or gypsum boards are to be butt jointed, crossed lined, filled & rubbed down and screw fixed. All gypsum edging and corners are to be protected with 12mm wide GI or aluminium angle. Junctions with existing walls, sills, window frames, mullions and window heads to be carried out using spaced scribing piece edge with soft gasket such as neoprene. Shop drawings proposal shall be submitted for approval on area that will affect the final appearance of the office.
- 3.5 All gypsum partitions are to be properly plastered and leveled to receive wallpaper or painting works. All markings on gypsum board are to be removed or sealed over with sealer paint if it is determined that the markings may affect painting or wallpapering works.
- 3.6 All fire rated Partitions shall be duly certified by PSB/Registered Inspector to meet local fire safety standards.
- 3.7 Contractors are to note that all partitioning works are to be lined and inspected by the PM before construction.

#### **4.0 GLAZING**

- 4.1 Glazing works shall be as specified herein and in relevant clauses with the General Specification of this tender document.
- 4.2 All clear or tinted float glass shall have flat, parallel surfaces that provide clear, undistorted vision and reflection. The degree and colour of tint shall be as approved by Designer.
- 4.3 Laminated glass shall consists of two or more layers of glass, as specified by the manufacturer, bonded together by one or more sheets of polyvinyl butyral (PVB) interlayer between each pieces of glass. The interlayer can be clear, translucent, opaque or tinted as indicated on drawings.
- 4.4 All tempered glass shall be supplied only in specified sizes and thickness. The ratio of length to width should not be greater than 7:1. All tempered glass shall be of minimum 10mm thick "Armour-plate" or other approved equivalent glass.
- 4.5 Adequate glazing clearances must be allowed especially with solar heat resistant or other heat absorbent glass. Edges of glass must not be nipped, shelled or damaged in any way and they must be clean-cut or smooth.
- 4.6 Opaque glass wall claddings on wall/partition shall come in selected colour to Designer's approval. Plywood backing shall be installed to provide a flat and even surface to receive new glass cladding. Gluing of opaque glass on to plywood surface shall be done with care and spot gluing marks shall not be visible under bright lighting conditions.
- 4.7 Fire-rated glass with stainless steel frame shall be duly certified by PSB/Registered Inspector to meet local fire safety standards.

- 4.8 Frosted film when specified, shall be install base on the selected pattern as indicated in the tender drawings. Contractor shall provide full scale artwork and frosted film sample for Designer's approval before installations.

## **5.0 CEILING**

### Acoustical Ceiling Boards

- 5.1 Unless otherwise stated, acoustic ceiling boards shall be 1200 x 600 x 13mm thick non-combustible mineral fiber panels on exposed slim grid system complete with approved suspension. Boards shall come with a NRC value of not lower than 0.7
- 5.2 Suspension systems shall be rigid both horizontally and vertically and must allow for fine adjustments each way. All members shall be aligned for true, level surface and straight line.
- 5.3 The Contractor shall co-ordinate with mechanical, electrical and other work related to all suspended ceilings.

### Calcium Silicate board Ceiling / Fibrous Plasterboard Ceiling

- 5.4 Plasterboard shall be 12.7mm thick tapered edge gypsum or fiberglass plasterboard to receive direct decoration. 12mm thick Calcium silicate boards shall be used for all Wet areas or at areas where humidity level is high.
- 5.5 Suspension shall be by means of "Consmat Gyplock" or other approved equivalent metal furring system. The fibrous plasterboards shall be screwed with corrosion resistant countersunk screws onto the metal furring system and the joints plastered smooth with stopping compound.
- 5.6 The final should appear sufficiently smooth and flat to receive one sealer coat and two finishing coats of acrylic emulsion paint.
- 5.7 The Contractor shall trim openings for recessed light fixtures, air-conditioning, diffusers, grilles, columns etc. and provide hinged access panels, additional framing angles and the like where required.